

# Aviation Flag Officers Conference

May 4-5, 2004  
Pensacola, Florida

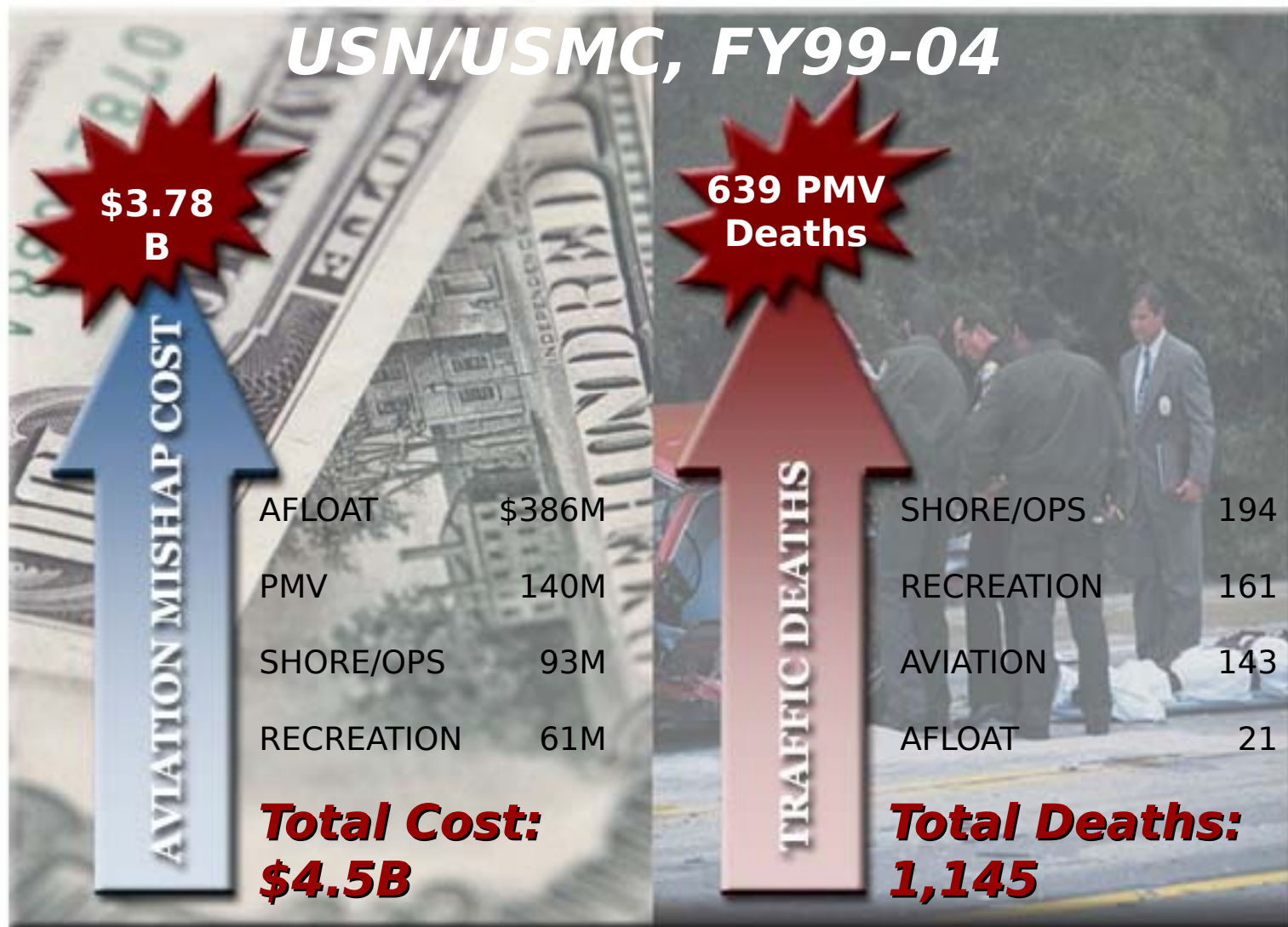


**RADM Dick Brooks, USN**  
**Commander, Naval Safety Center**



# Cost and Deaths

## USN/USMC, FY99-04



NSC FY04 Data: 28 Apr 04



# Where Is More Attention Needed?

## USN/USMC - The Largest Challenge: Aviation - Traffic - Recreation

COST			DEATHS										
	OVERALL	AVIATION	OVERALL	PMV					RECREATION				
				Shore	Air		Afloat		Shore	Air		Afloat	
				TOT	MC	NV	NV	MC	TOT	MC	NV	NV	MC
				NV					NV				
FY99-03	\$ 3.8B	\$ 3.2B	1,045	585	59	34	127	204	141	14	16	30	27
				161					54				
FY02	\$705M	\$611M	238	140	17	13	32		33	3	6	4	8
				48 30					12				
FY03	\$994M	\$926M	232	119	8	6	31		32	5	4	5	7
				45 29					11				
FY04	\$661M	\$620M	101	56	5	4	13		22	2	1	5	7
				16 18					7				

NSC Data: 03 May 04

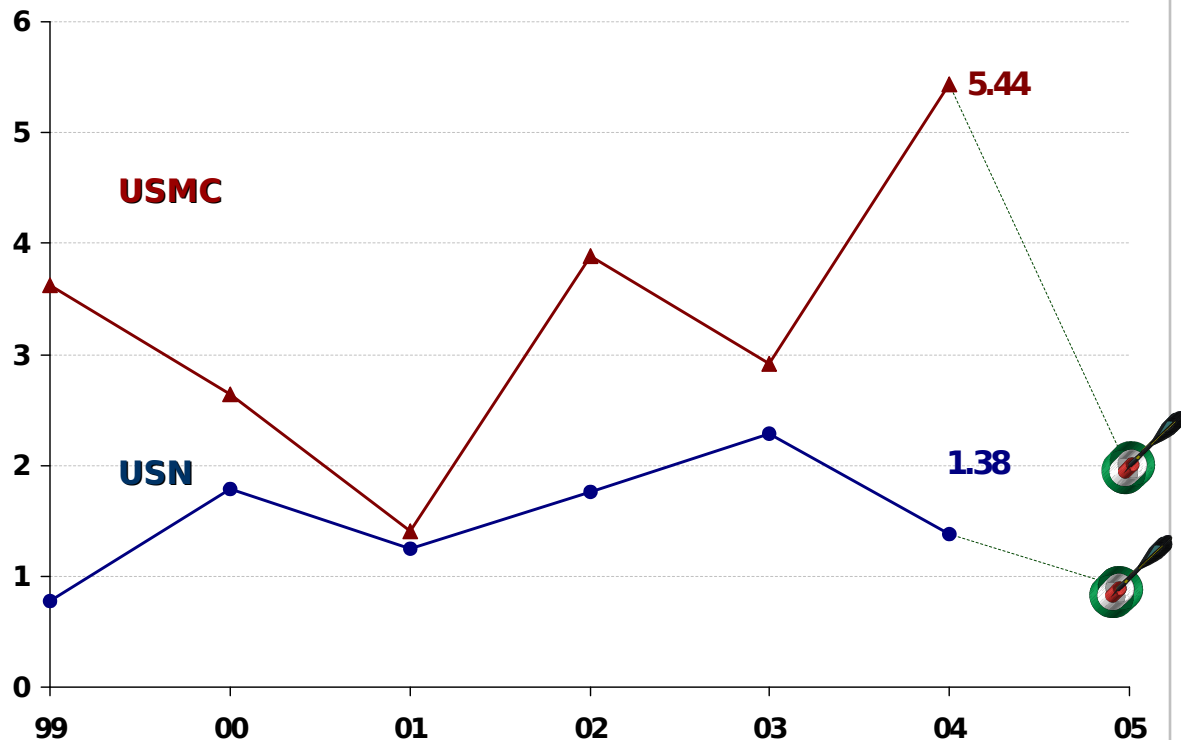




# Class A Flight Mishap Rates

## USN/USMC FY99-04

Mishap Rates per 100,000 flight hours



USN/USMC	FY02	FY03	FY04
<b>Total Mishaps</b>	<b>36 21/15</b>	<b>37 26/11</b>	<b>18 8/10</b>
F-18	4/2	9/3	5/2
F-14	3/0	4/0	1/0
EA-6B	1/1	4/0	0/0
S-3	1/0	3/0	0/0
E-2	0	2/0	0/0
Other	7/7	3/5	1/4
UH-1	0/3	0/2	0/2
AH-1	0/1	0/1	0/2
H-53	2/1	1/0	0/0
SH-60	3/0	0/0	1/0

**USMC FY05 Goal:**

**1.94**

**USN FY05 Goal:**

**0.88**

NSC FY04 Data: 28 Apr 04



# Helo Class-A Flight Mishaps

**USN/USMC FY93-04**



## **FY04 HELO MISHAPS**

**USN 0.84**

**USMC 6.09**

**ALL HELO 2.98**

**ALL CLASS A 2.35**

**Helo includes V-22**

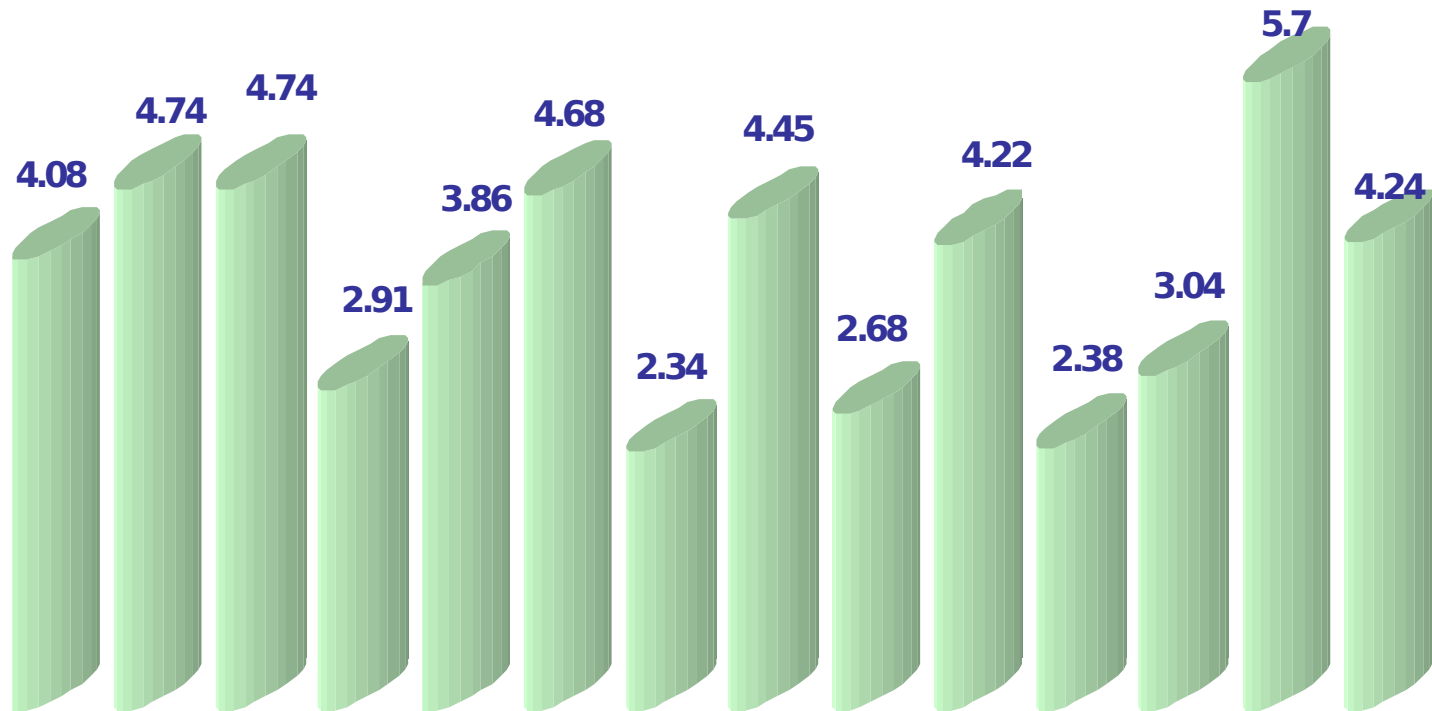
NSC FY04 Data: 28 Apr 04



# TACAIR Events/Rates

USN/USMC, FY91-04  
Class-A Flight Mishaps

**All  
Fighter  
All Attack  
S-3  
E-2  
AV-8B**



Navy  
Events

23 2 25 12 15 1 5 14 4 13 8 1 2 6

4

6

0

3

Marine  
Events

9 9 7 6 8 11 7 8 9 6 3 6 6 4

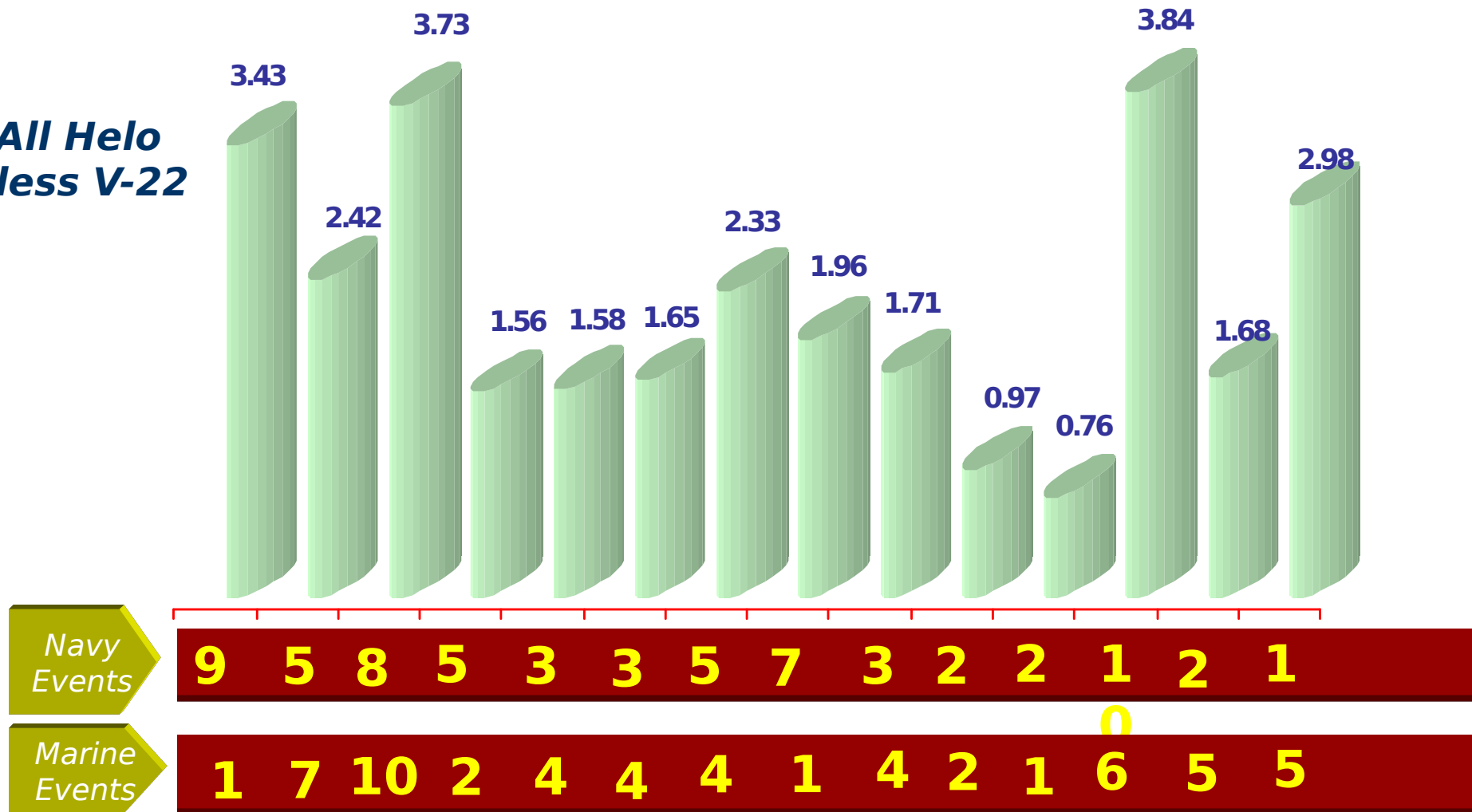




# ROTARY Events/Rates

USN/USMC, FY91-04  
Class-A Flight Mishaps

**All Helo  
less V-22**



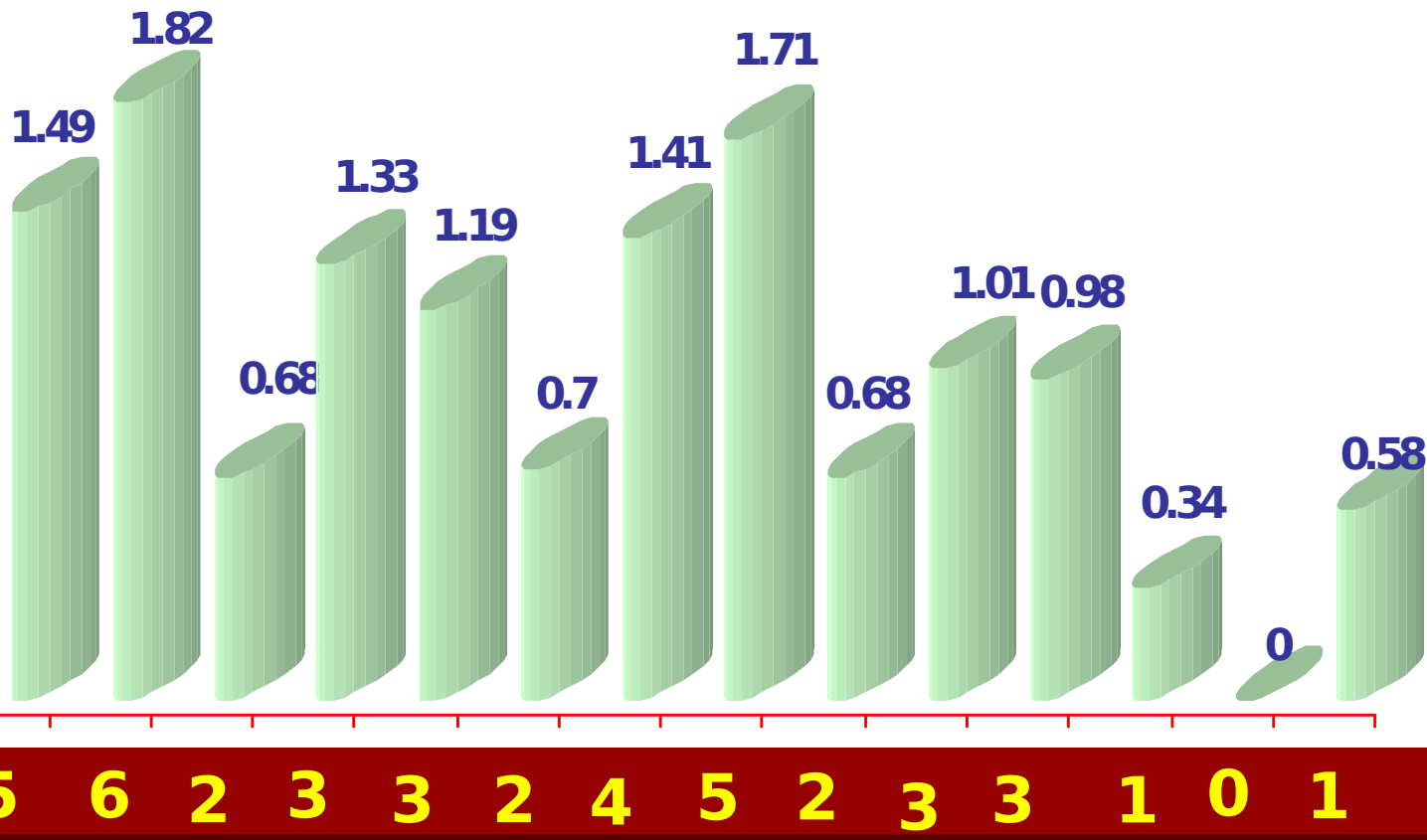


# CNATRA Events/Rates

USN/USMC, FY91-04  
Class-A Flight Mishaps

## Trainer Aircraft

TA-4  
T-2  
T-34  
T-39  
T-44  
T-45



FY04: 28 April

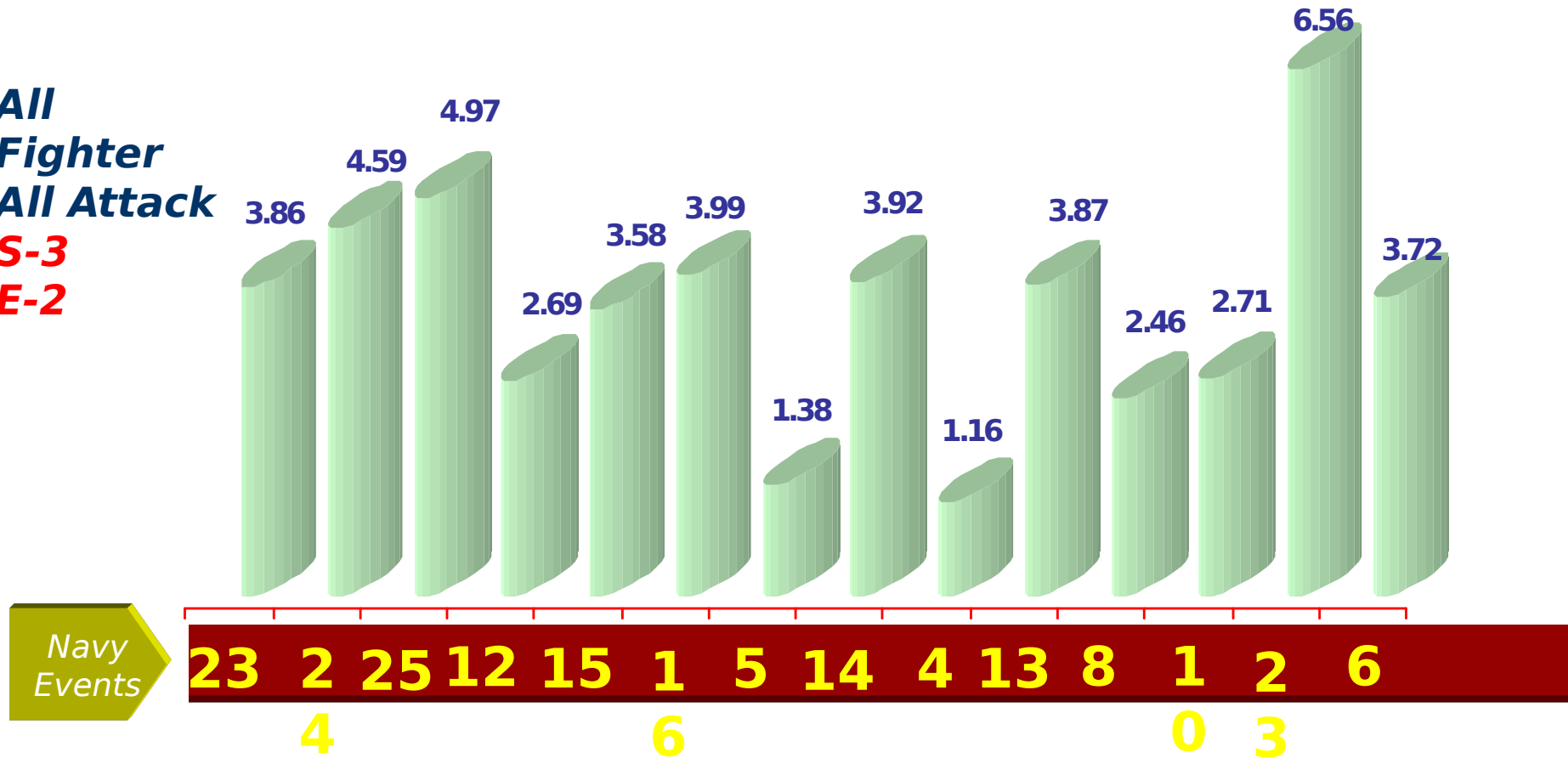




# TACAIR Events/Rates

USN FY91-04  
Class-A Flight Mishaps

**All  
Fighter  
All Attack  
S-3  
E-2**



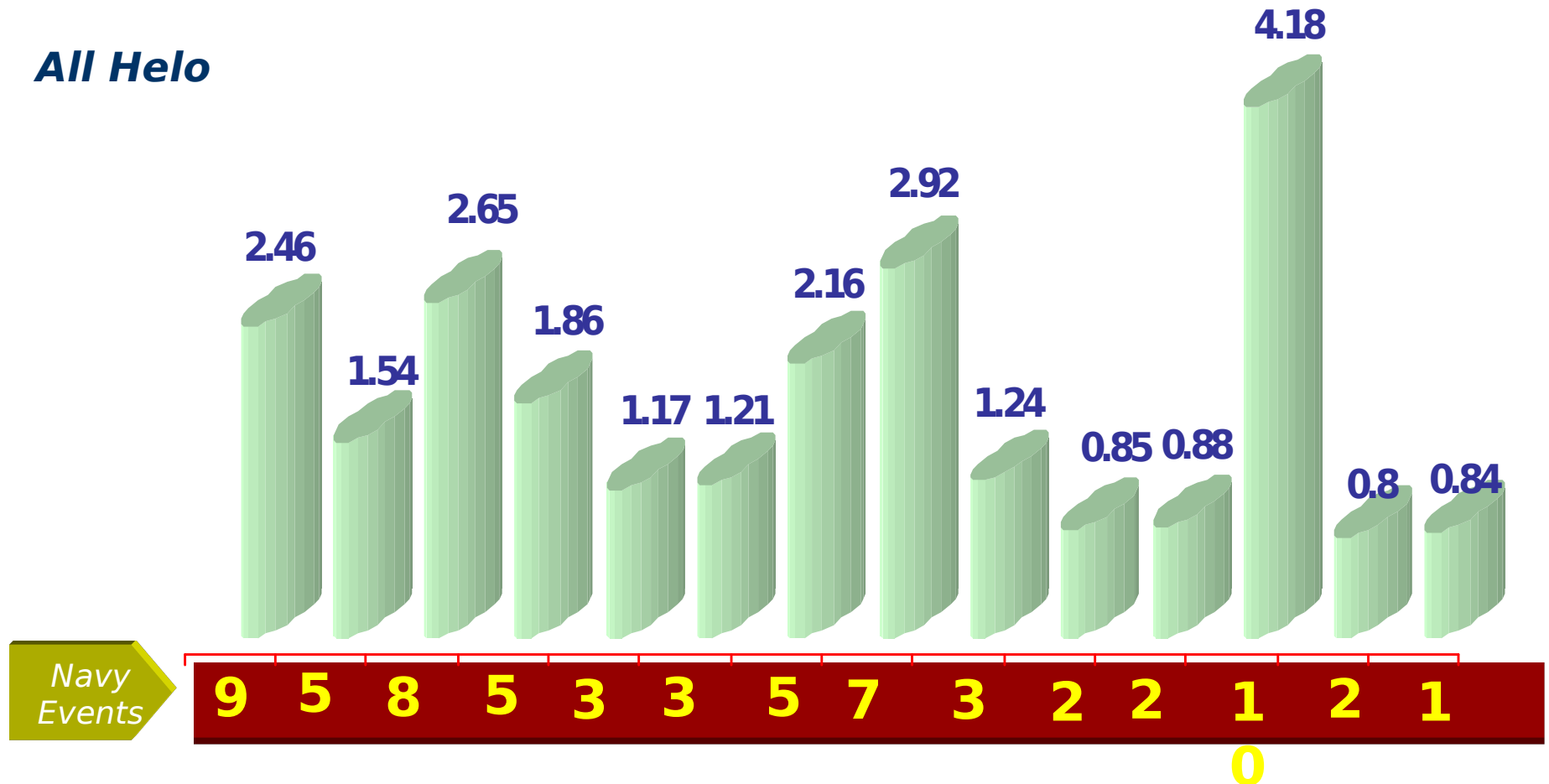
FY04: 28 April



# ROTARY Events/Rates

USN FY91-04 Class-A Flight Mishaps

## All Helo



FY04: 28 April

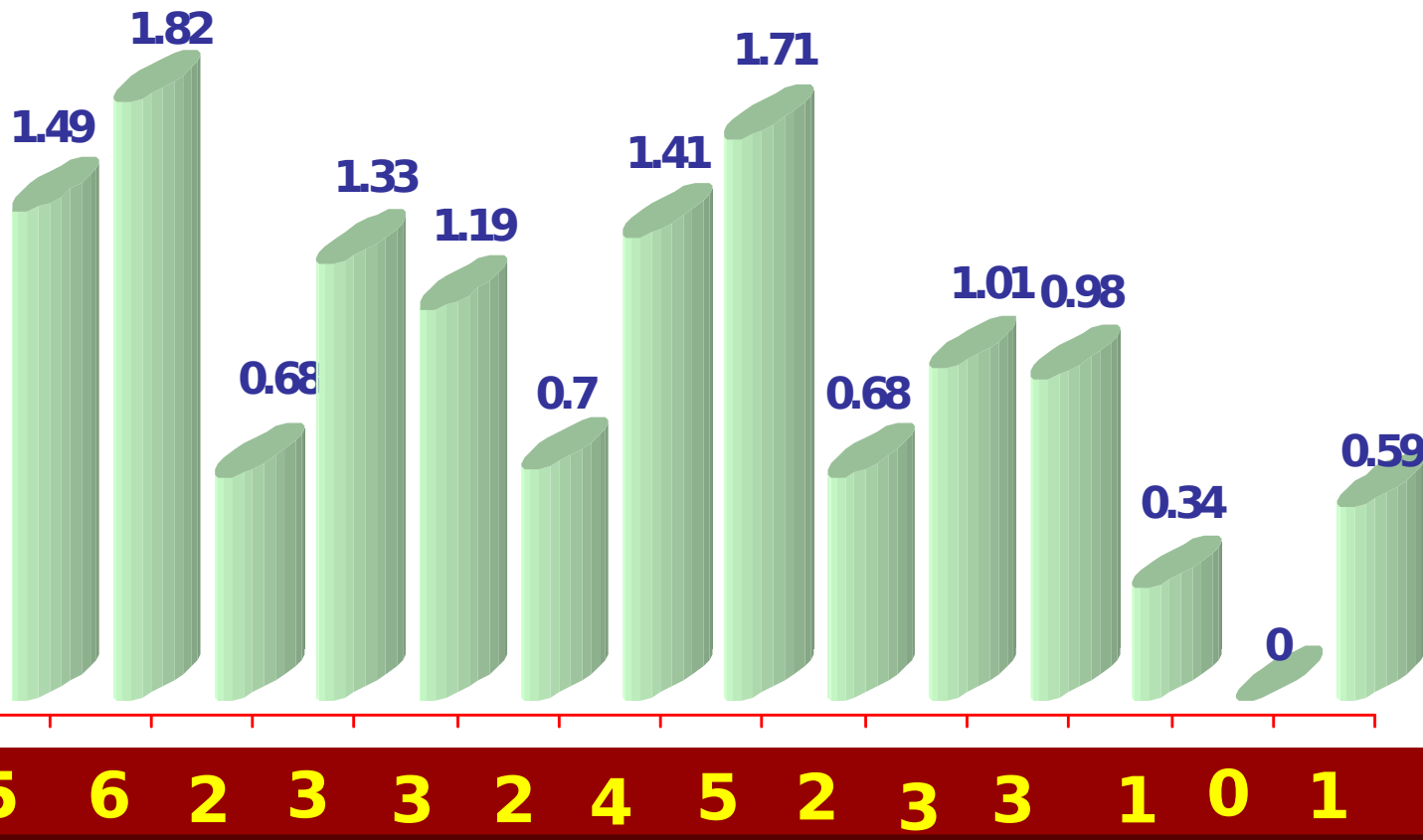


# CNATRA Events/Rates

USN FY91-04  
Class-A Flight Mishaps

## Trainer Aircraft

TA-4  
T-2  
T-34  
T-39  
T-44  
T-45

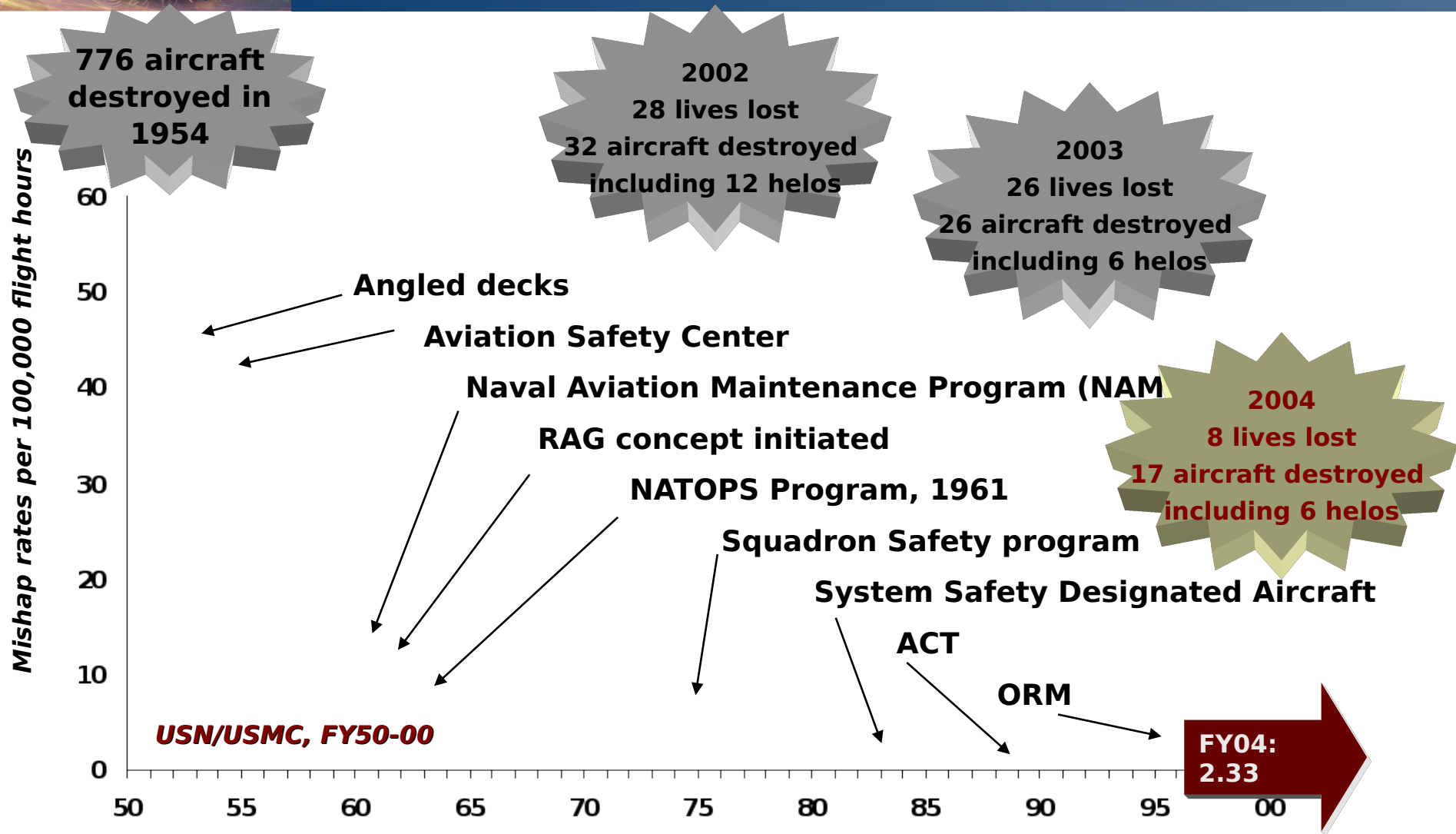


Navy  
Events

FY04: 28 April



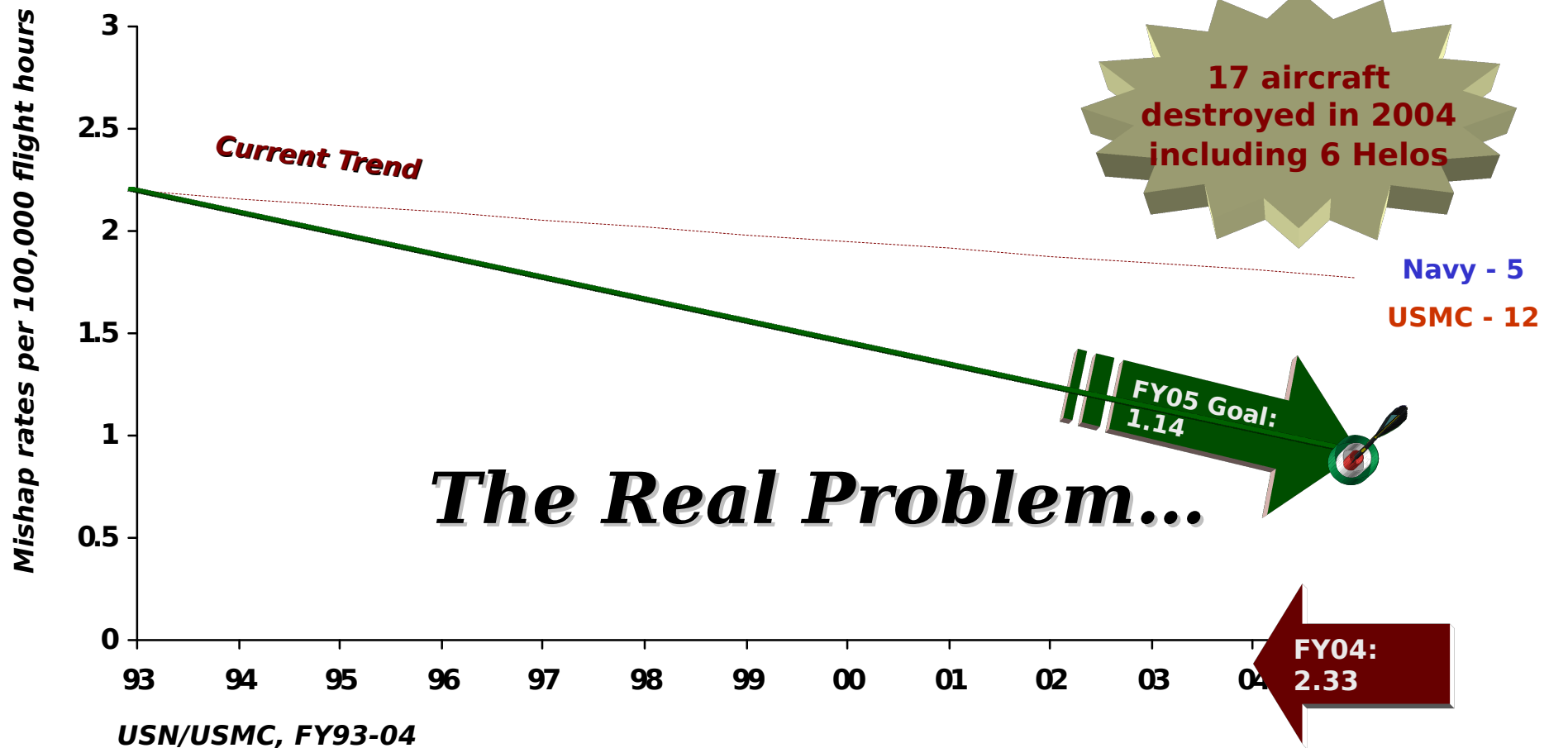
# Naval Aviation Mishap History



NSC FY04 Data: 28 Apr 04



# Naval Aviation Mishap Trend



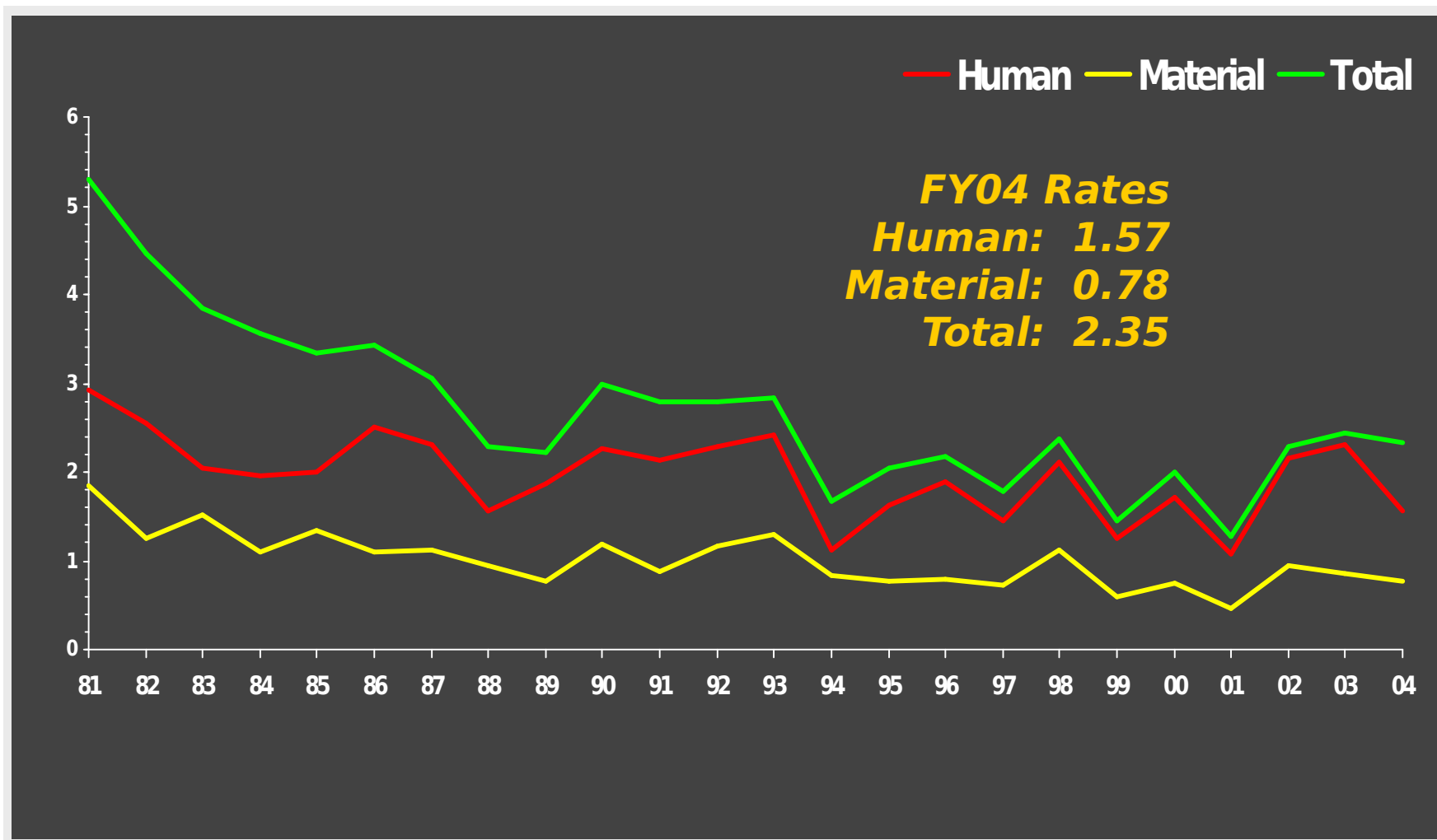
NSC FY04 Data: 28 Apr 04





# Class-A Flight Mishaps Trend

USN/USMC, FY81-04

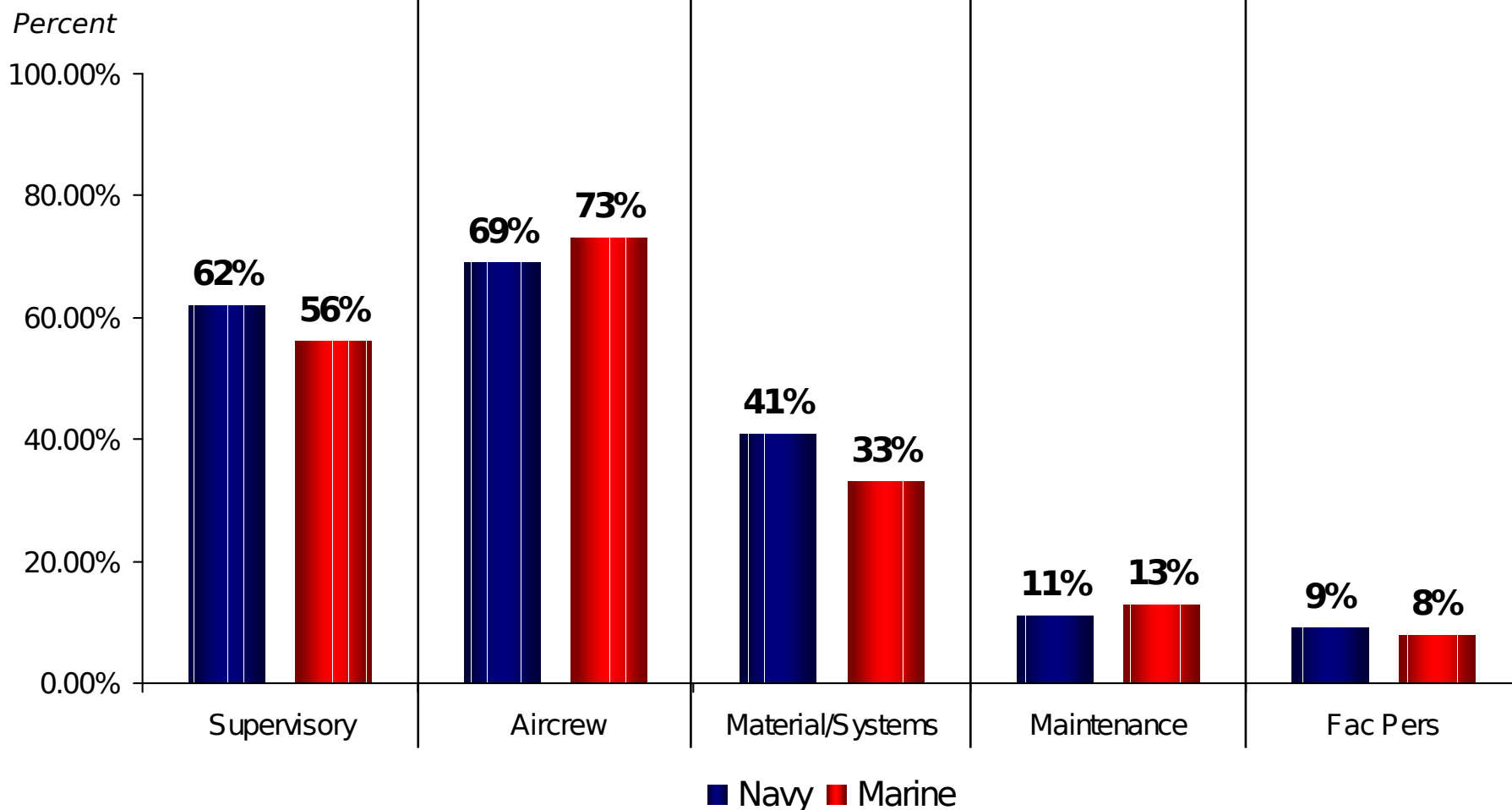


FY02: 30 April



# Cause Factors of Aviation Mishaps

## USN/USMC Class-A Flight Mishaps FY99-04





# Human Error

**USN/USMC, FY98-03**

## **No. of Class-A Mishaps**

## **Human Error**

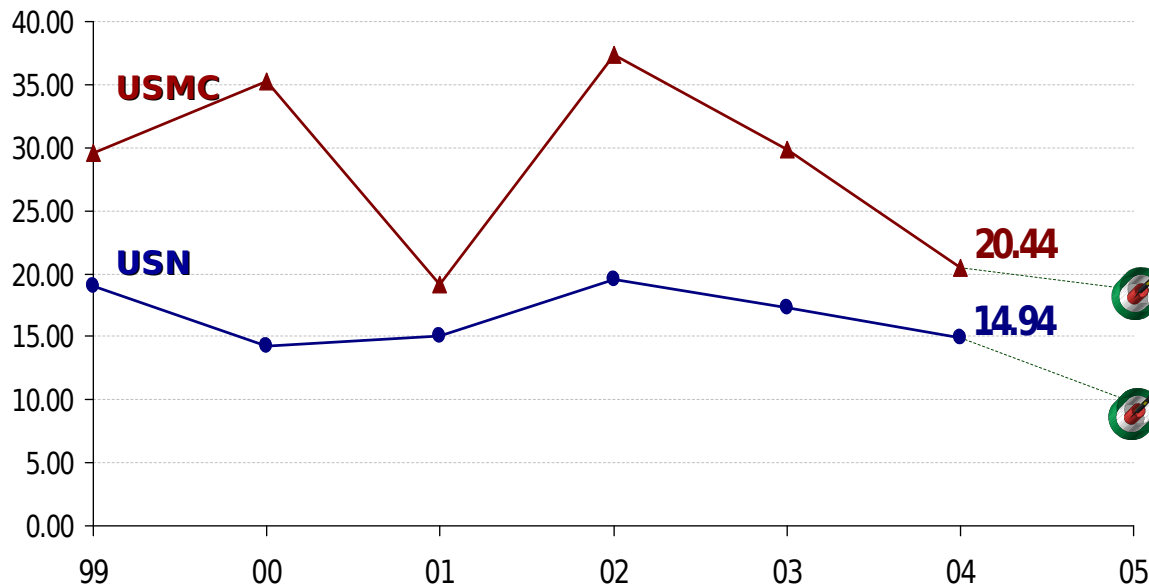
USN Aviation	119 of 133	HE 89%	Non-HE 11%
USMC Aviation	60 of 69	HE 87%	Non-HE 13%
Navy Afloat	48 of 51	HE 94%	Non-HE 6%
Navy Operational Shore(non-MV)* <small>*based on events with known causes</small>	50 of 56*	HE 89%	Non-HE 11%
Navy PMV	328 of 383	HE 86%	Non-HE 14%



# PMV Fatality Rates

## USN/USMC FY99-04

Fatality Rates per 100,000 personnel per year



USN/USMC	FY02	FY03	FY04
Total PMV Fatalities	140	119	54
SAILORS	75	66	33
MARINES	65	53	21
TOTAL AVIATION	N/MC 13/17	N/MC 6/8	N/MC 4/5
TOTAL AFLOAT	32	31	11
TOTAL SHORE	78	74	34

**USMC FY05 Goal:  
18.70**

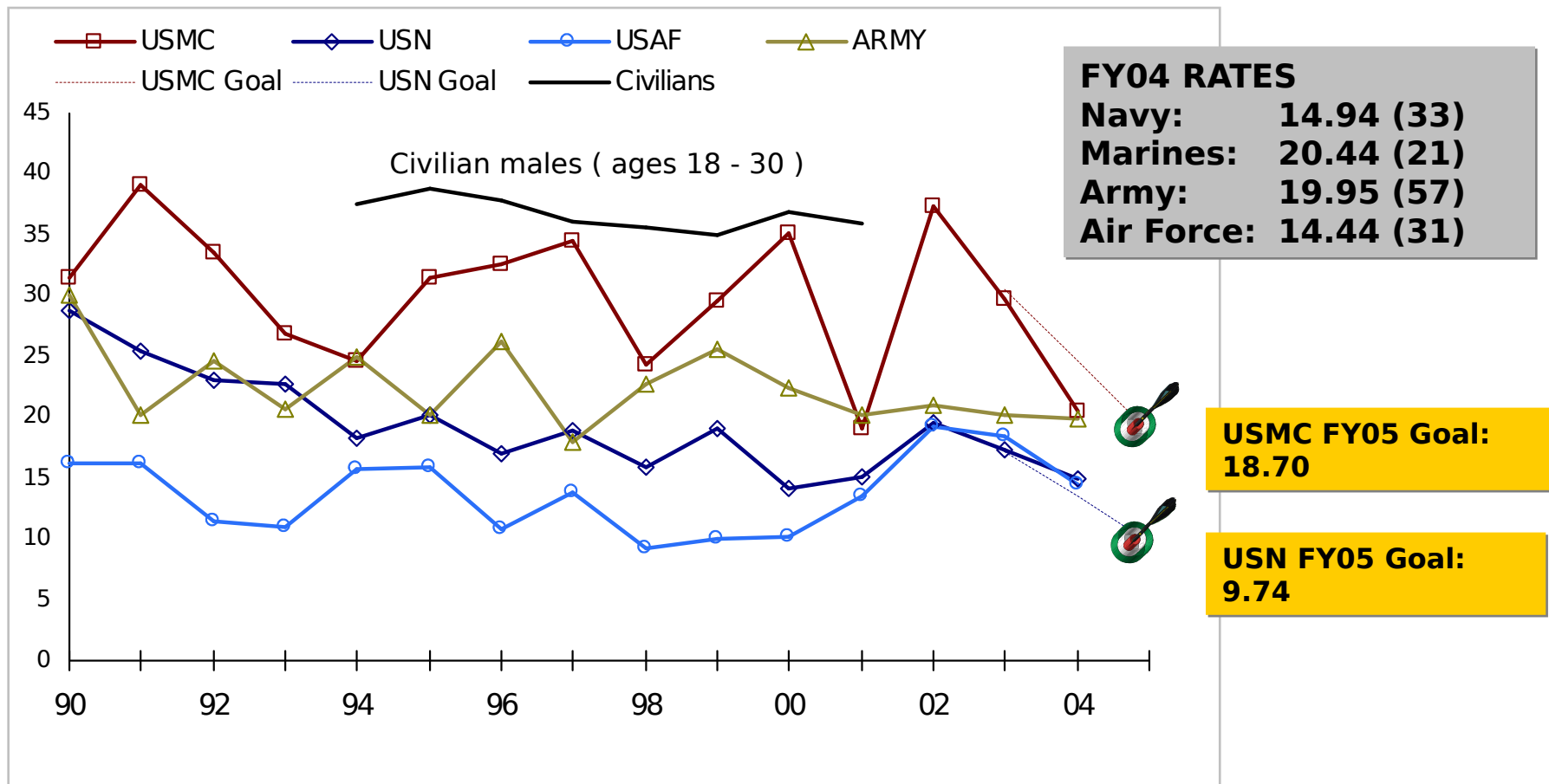
**USN FY05 Goal: 9.74**

NSC FY04 Data: 28 Apr 04



# Traffic Death Rates

## All Services FY90-04



Fatality Rates per 100,000 personnel per year

NSC Data: 28 Apr 04





# Factors In Traffic Deaths

**USN/USMC, FY01-03**

**FY01-03 Deaths: 349**

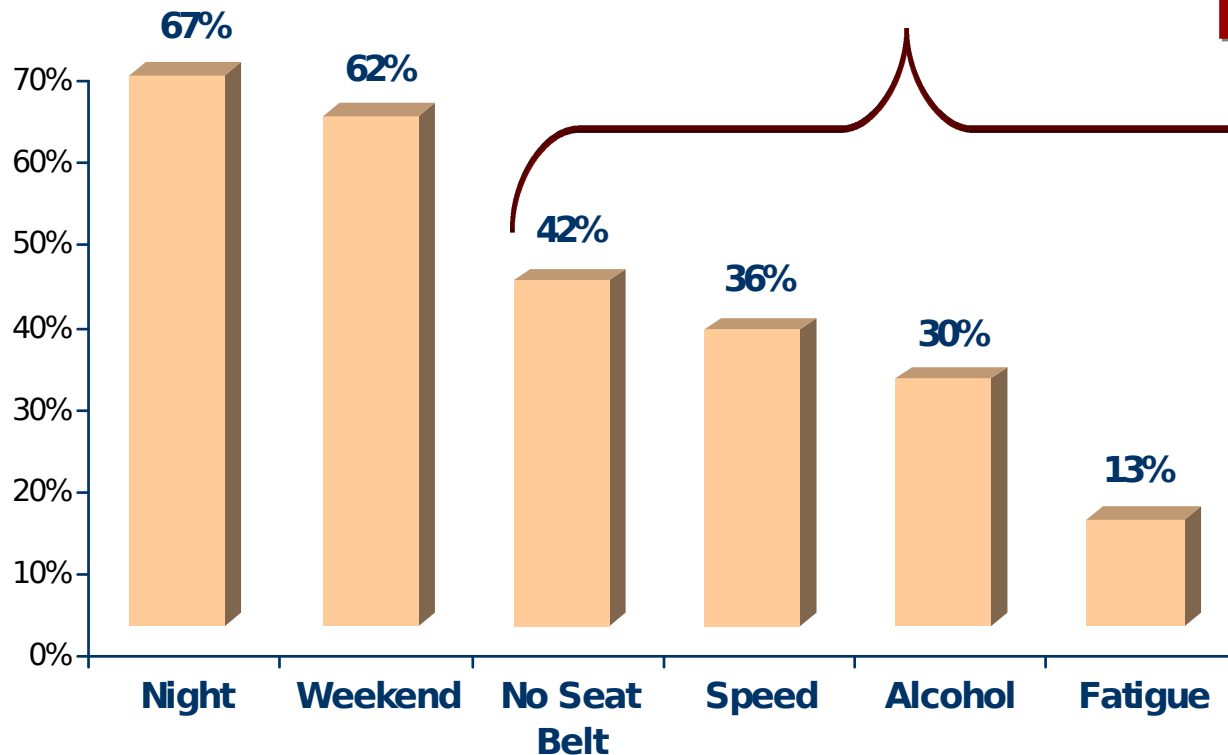
**FY01: 90**

**FY02: 140**

**FY03: 119**

**FY04 Deaths: 54**

**LEADERSHIP**



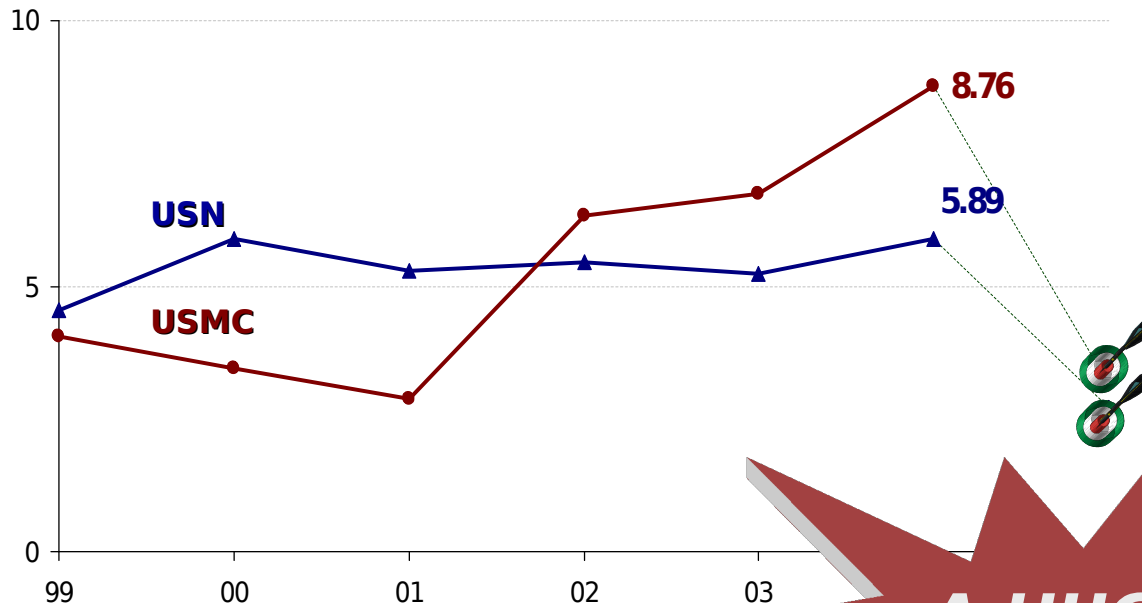
NSC Data: 28 Apr 04



# Recreation Fatality Rates

## USN/USMC, FY99-04

Fatality Rates per 100,000 personnel per year



USN/USMC	FY02	FY03	FY04
<b>Total Recreation Fatalities</b>	<b>32</b>	<b>32</b>	<b>22</b>
SAILORS	21	20	13
MARINES	11	12	9
TOTAL AVIATION	N/MC 6/3	N/MC 4/5	N/MC 1/2
TOTAL AFLOAT	5	5	5
TOTAL SHORE	18	18	14

**USMC FY05 Goal:**  
**3.16**

**USN FY05 Goal:**  
**2.72**

**A HUGE  
CHALLENGE**

NSC Data: 28 Apr 04



# QUESTIONS?